Letter to the Editor, *Nature* [London], 1935(August 24), *136*, p. 297, reprinted with permission.

Technique of Factor Analysis

FACTOR analysis is a subject upon which Prof. G. H. Thomson, Dr. Wm. Brown and others have frequently written letters to NATURE. This analysis is concerned with a selected population of n individuals each of whom has been measured in m tests. The $(m)(m-1)/2$ intercorrelations for these m variables are subjected to either a Spearman or other factor analysis.

The technique, however, can also be inverted. We begin with a population of n different tests (or essays, pictures, traits or other measurable material), each of which is measured or scaled by m individuals. The $(m)(m-1)/2$ intercorrelations are then factorised in the usual way.

This inversion has interesting practical applications. It brings the factor technique from group and field work into the laboratory, and reaches into spheres of work hitherto untouched or not amenable to factorisation. It is especially valuable in experimental aesthetics and in educational psychology, no less than in pure psychology.

It allows a completely new series of studies to be made on the Spearman 'central intellective factor' (g), and also allows tests to be made of the Two Factor Theorem under greatly improved experimental conditions. Data on these and other points are to be published in due course in the *British Journal of Psychology*.

W. STEPHENSON.

Psychological Laboratory,
University College,
Gower Street,
London, W.C.1.
June 28.